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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,005	01/29/2002	Kenji Suzuki	100353-00096	3133

7590

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EXAMINER

IM, JUNGHWA M

ART UNIT

PAPER NUMBER

2811

DATE MAILED: 12/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/058,005

Applicant(s)

SUZUKI ET AL.

Examiner

Junghwa M. Im

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 4-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of claims 1-3 and 10 in Paper No. 5 is acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 10, Pending claim recites "an unused I/O cell" and assigning this "unused" cell to be a power supply I/O cell. Understanding is that "unused" means "not used" or "not put to use". Then, this unused I/O cell can not be assigned as a power supply cell which is obviously used as a power supply.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b)

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only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-3 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bassett (U.S. Pat. No. 6,242,814).

Regarding claim 1, Bassett shows in Fig. 2 a semiconductor integrated circuit comprising:

Pads (40's);

a first power supply I/O cell (one of 40's) which is connected to an external pin through a corresponding one of said pads; and

a second power supply I/O cell (one of 40's) which is not connected to an external pin through a corresponding one of said pads, but receives power supply from said first power supply I/O cell.

Regarding the external connection to an external pin, Bassett shows in Fig. 4 one of Vdd cells (40) is connected to a lead frame with a wire (210) while another Vdd cell (40) is not.

Also, Bassett discloses inherently or in an alternatively obvious manner that all of a single Vdd pad are connected and placed directly over the Vdd bus, thus both a used Vdd cell and an unused Vdd cell are connected together through a bus line. And the bus is connected to a corresponding band pad site for a power supply, thus the unused Vdd cells receives power through the wire connected Vdd cell which is connected to the Vdd bus together with the unused Vdd cell.

See the respective portions of the specification of Bassett such as col. ~~2~~, lines 37-56.

Regarding claim 2, Bassett shows in Fig. 1 the semiconductor integrated circuit further comprising:

- an internal cell (20);
- a power supply line which provides power supply to the internal cell;
- a line (210 in Fig. 4) which connect between the first power supply I/O cell and the power supply line; and
- a line which connects between the second power supply I/O cell and the power supply line.

Note that an internal cell is for a signal cell (20) which is connected to a signal bond pad site through a wire (210)

As previously discussed above, Bassett discloses that both of the first power supply I/O cell and the second power supply I/O cell are connected together through the power supply bus line (Vdd bus line) to a corresponding a power supply bond pad site.

Regarding claim 3, Bassett discloses in Fig.4 the second power supply I/O cell is not connected to the corresponding one of pads that corresponds to the second power supply I/O cell.

Note that one of the Vdd cells is not connected with a wire 210.

Claim Rejections - 35 USC § 102/103

Claim 10 is rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lin (U.S. Pat. No. 6,246,122).

Regarding claim 10, Lin shows throughout the Figures especially in Fig. 2 a semiconductor integrated circuit, made by a designing process that is comprises:

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identifying an unused I/O cell (24) having no external connection; and
assigning the I/O cell to be a power supply I/O cell having no external connection.

Lin shows that an unused I/O cell which is not in use and thus is not connected to an I/O pin (referred as an NC pin, a no-connected pin).

Lin shows in Fig.2 a no-connect pin (24) which corresponds to an unused I/O cell without an external connection, and this NC pin is connected through bond pad (22) to EDS protective unit (23) which can work as a power supply.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Junghwa M. Im whose telephone number is (703) 305-3998. The examiner can normally be reached on MON.-FRI. 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on (703) 308-2772. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JMI
December 14, 2002


Sara Crane
Primary Examiner